Re: Bolton PCB Soil Sample Location Proposal Drawings
John Terrill
to:
Kimberly Tisa
03/26/2012 08:47 AM
Cc:
"Joyce.Stille@bolton.ct.org", Ashis Roychowdhury
Hide Details
From: John Terrill <terrilljohn@yahoo.com>

To: Kimberly Tisa/R1/USEPA/US@EPA

Cc: "Joyce.Stille@bolton.ct.org" <Joyce.Stille@bolton.ct.org>, Ashis Roychowdhury <aroychowdhury@eagleenviro.com>

Please respond to John Terrill <terrilljohn@yahoo.com>

3 Attachments

Bolton PCB Soil Sampling 1.pdf Bolton PCB Soil Sampling 2.pdf Bolton PCB Soil Sampling 3.pdf

Ms. Tisa,

This correspondence is in response to your email Re: FW: Bolton PCB Soil Sample Location Proposal Drawings, June 16, 2011 1:32 PM:

The soil characterization sampling plan has been revised. Drawings depicting sample locations are attached and a summary narrative of the sampling protocol is presented below:

A grid plot consisting of 3.0 meter grid intervals will be laid out over each soil remediation area with the co-linear grid points of the X axis aligned with the foundation walls of the building and the origin at the edge of the remediation area in accordance with 40 CFR 761 Subpart N §761.265(a).

Soil remediation areas will include all soil adjacent to window openings where PCB-containing caulk has been remediated.

A minimum of four (4) and a maximum of six (6) adjacent (sub) samples will be composited and submitted to the laboratory as a single sample. The maximum area composited into a single sample will consist of six (6) grid points, with a maximum of three (3) co-linear grid points bounding any side (basically six (6) sample points on a three (3) meter by six (6) meter grid plot).

The collection and analysis of twenty (20) composited samples (plus QC) is anticipated.

Tools such as a garden hand spade may be used to loosen the soil. Tools will be washed with soap and water then decontaminated using clean hexane between each set of composite samples to avoid cross contamination. Disposable plastic scoops will be used to collect the samples.

Prior to sample collection, the sampler shall don disposable nitrile gloves and other PPE as required. Each component subsample comprising the composite sample will be collected as described above. A four (4) ounce glass jar full of soil will be collected from each designated grid point and placed into a clean container large enough to hold all of the (sub)samples with a minimum of twenty percent (20%) headspace. The subsamples shall be thoroughly mixed to result in a visibly homogenous composite sample. One scoop of the composite sample shall be placed in a labeled, clean, four (4) ounce glass jar and sealed with a Teflon-lined cap for submittal to the laboratory. The scoops and gloves will be disposed of after each composite sample collection avoid cross contamination. The container used to composite the samples will be decontaminated or disposed of. Samples will be stored and transported in a cooler with ice packs until acceptance by the laboratory.

Q/C samples will include rinsate blanks and duplicates.

Samples will be analyzed at Phoenix Environmental Laboratories, Inc. located in Manchester Connecticut. PCB will be extracted from samples using EPA Method 3540C (Soxhlet extraction) and analyzed using EPA SW846 8082. The reporting limit of the analytical method shall be less than one hundred (100) micrograms per kilogram (0.1 ppm).

The laboratory reported PCB concentration for each composited sample will be multiplied by the number of subsamples that comprised the composite to calculate the "corrected result". If a "corrected result" is calculated to be greater than one (1) ppm PCB, then the area to be remediated will include the area of inference defined by the composite sample grid plus an additional three (3) meters on either side of the area of inference along the x-axis.

Please feel free to contact me with any questions or comments.

Thank you,

John Terrill
Environmental Consultant
Eagle Environmental, Inc.
206.434.0717
jterrill@eagleenvironmental.com

-----Original Message-----
From: Tisa.Kimberly@epamail.epa.gov [mailto:Tisa.Kimberly@epamail.epa.gov]
Sent: Thursday, June 16, 2011 1:32 PM
To: Ashis Roychowdhury
Cc: 'Stille, Joyce'
Subject: Re: FW: Bolton PCB Soil Sample Location Proposal Drawings

Ashis-

Is this an investigation sampling plan? If so, I need to understand how
you are treating the composite samples. Under the PCB regs, compositing

is not allowed for characterization sampling.

Based on your discussion 27 samples will be collected, but only 3 samples will be submitted for analysis. Thus, based on my math, each composite sample will contain 9 grab samples. In lieu of analyzing each grab sample (i.e. 27 samples), if you still want to do the compositing, the following would apply:

- the grab samples must be composited based on volume to volume and not weight to weight;
- the final composite result must be multiplied by the # grabs comprising the composite (e.g. Composite result x 9 grabs/composite). This "corrected" result would be used as the basis for determining if the PCB concentration is greater than 1 ppm.

Note that by doing the 9 grabs per composite, the laboratory's reporting limit must be less than 0.1 mg/kg based on dry weight. This may be difficult. One resolution is to use a smaller # of grabs/composite...for example 3 samples/composite rather than 9 samples/composite. The "corrected" result would then be based on 3 samples rather than 9.

Please call to discuss to insure that you are clear on this prior to implementing.

Kimberly N. Tisa
U.S. Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code: OSRR07-2
Boston, MA 02109-3912

Phone: 617.918.1527
E-Fax: 617.918.0527

tisa.kimberly@epa.gov

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| From: |
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|"Ashis Roychowdhury" <aroychowdhury@eagleenviro.com>
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| To: |
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|Kimberly Tisa/R1/USEPA/US@EPA
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| Cc: |
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|'"Stille, Joyce"' <Joyce.Stille@boltonct.org> |
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| Date: |
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|06/15/2011 12:29 PM |
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|FW: Bolton PCB Soil Sample Location Proposal Drawings
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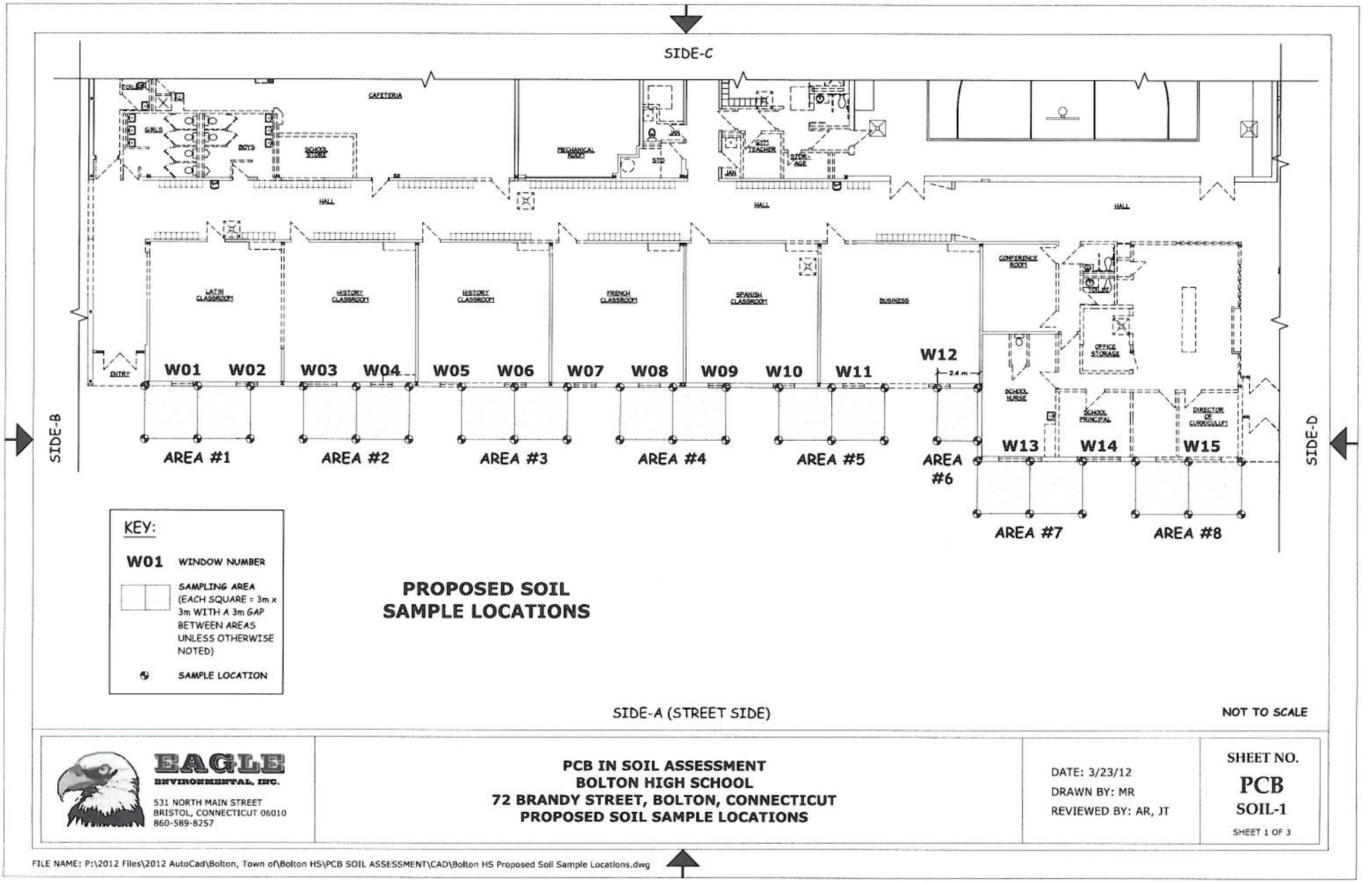
Kim,

As I promised, I am submitting a revised plan to sample the exterior soil around the building per attached drawings. From each sampling area, we will collect 4 sub-samples along each grid line (8'', 16" & 24" from the building edge) and make one composite sample for each grid. This means we will have 3 samples from each area for a total 27 samples. Please let me know whether it is acceptable to you. Thanks.

Ashis

From: Michelle Rudy [mailto:mrudy@eagleenviro.com]
Sent: Wednesday, June 15, 2011 11:59 AM
To: 'Ashis Roychowdhury'
Subject: Bolton PCB Soil Sample Location Proposal Drawings

Michelle Rudy
Eagle Environmental, Inc.
531 N. Main Street
Bristol, CT 06010
860.589.8257 x205
[attachment "Bolton PCB Proposed Soil Sample Locations.pdf" deleted by Kimberly Tisa/R1/USEPA/US]



PROPOSED SOIL SAMPLE LOCATIONS

NOT TO SCALE

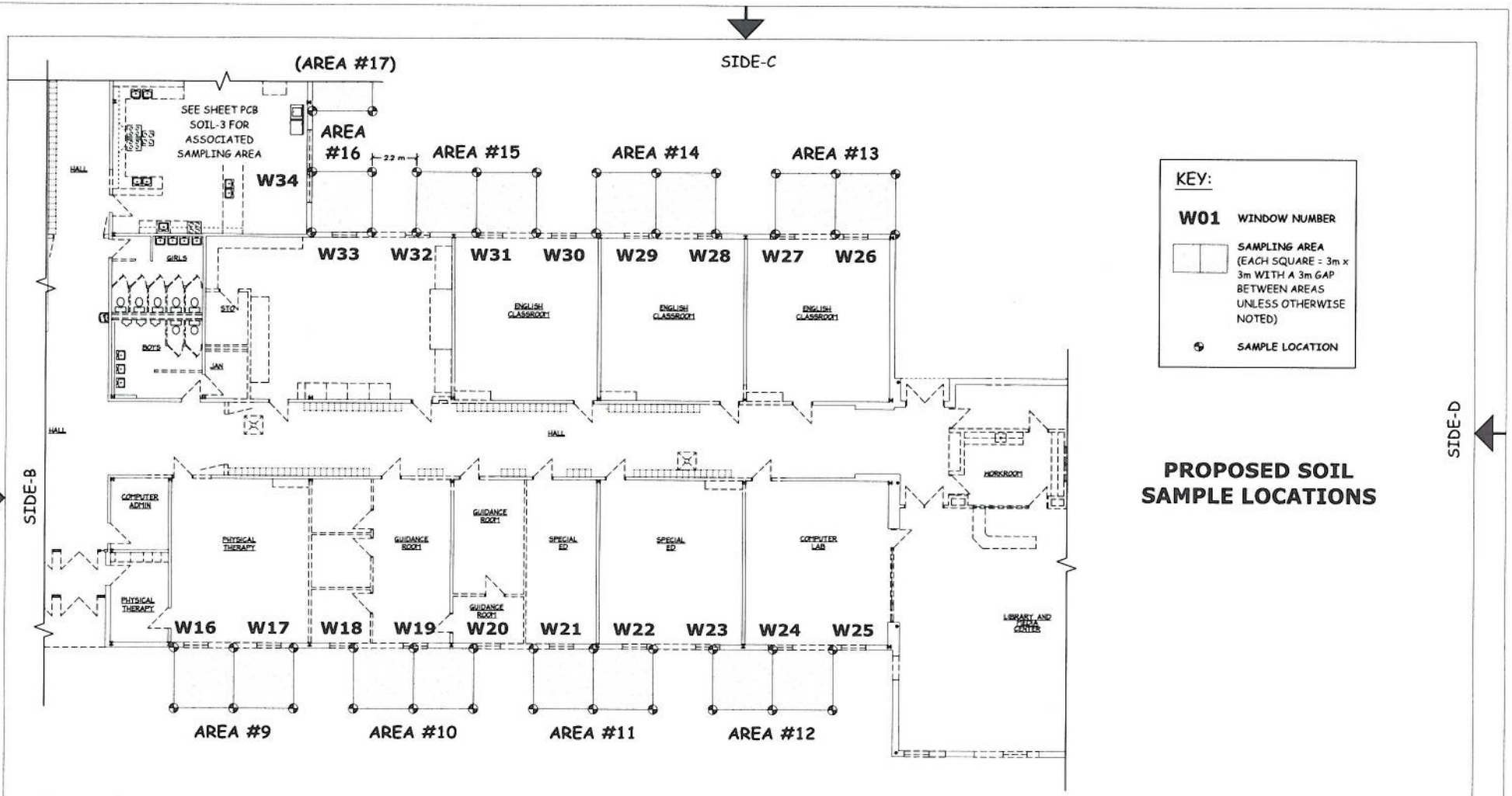
EAGLE ENVIRONMENTAL, INC.
531 NORTH MAIN STREET
BRISTOL, CONNECTICUT 06010
860-589-8257

PCB IN SOIL ASSESSMENT
BOLTON HIGH SCHOOL
72 BRANDY STREET, BOLTON, CONNECTICUT
PROPOSED SOIL SAMPLE LOCATIONS

DATE: 3/23/12
DRAWN BY: MR
REVIEWED BY: AR, JT

SHEET NO.
PCB
SOIL-1
SHEET 1 OF 3

FILE NAME: P:\2012 Files\2012 AutoCad\Bolton, Town of\Bolton HS\PCB SOIL ASSESSMENT\CAD\Bolton HS Proposed Soil Sample Locations.dwg



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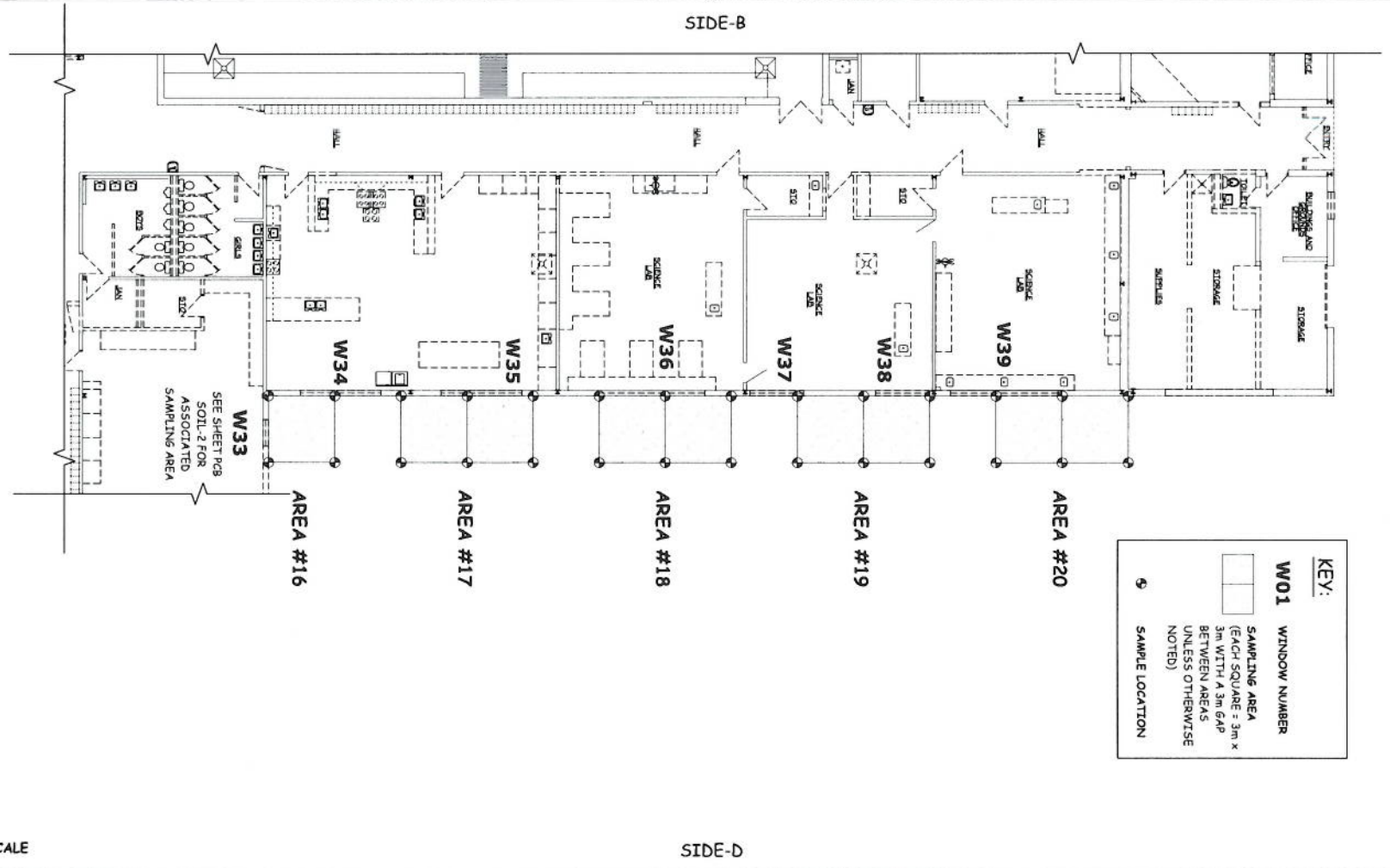
BRISTOL, CONNECTICUT 06010
860-589-8257

PCB IN SOIL ASSESSMENT
BOLTON HIGH SCHOOL
72 BRANDY STREET, BOLTON, CONNECTICUT
PROPOSED SOIL SAMPLE LOCATIONS

DATE: 3/23/12
DRAWN BY: MR
REVIEWED BY: AR, JT

SHEET NO.
PCB
SOIL-2
SHEET 2 OF 3

FILE NAME: P:\2012 Files\2012 AutoCad\Bolton, Town of\Bolton HS\PCB SOIL ASSESSMENT\CAD\Bolton HS Proposed Soil Sample Locations.dwg



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BRISTOL, CONNECTICUT 06010
860-589-8257

PCB IN SOIL ASSESSMENT
BOLTON HIGH SCHOOL
72 BRANDY STREET, BOLTON, CONNECTICUT
PROPOSED SOIL SAMPLE LOCATIONS

DATE: 3/23/12
DRAWN BY: MR
REVIEWED BY: AR, JT

SHEET NO.
PCB
SOIL-3
SHEET 3 OF 3

FILE NAME: P:\2012 Files\2012 AutoCad\Bolton, Town of\Bolton HS\PCB SOIL ASSESSMENT\CAD\Bolton HS Proposed Soil Sample Locations.dwg